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APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/765,911	01/29/2004		Kristy A. Campbell	M4065.0937/P937	M4065.0937/P937 2647	
24998	7590	09/16/2005		EXAMINER		
		O MORIN & OS	NGUYEN,	NGUYEN, THINH T		
2101 L Stree Washington,	,	7	ART UNIT	PAPER NUMBER		
		•		2818		

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/765,911	CAMPBELL ET AL.					
Office Action Summary	Examiner	Art Unit					
	Thinh T. Nguyen	2818					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	Lely filed the mailing date of this communication. (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on 29 Ja	Responsive to communication(s) filed on 29 January 2004.						
2a) This action is FINAL . 2b) ☑ This	action is non-final.						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims	•						
4)⊠ Claim(s) <u>1-71</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) is/are rejected.							
7)⊠ Claim(s) <u>44</u> is/are objected to. (44)	7) $oxtimes$ Claim(s) 44-is/are objected to. (44)						
8)⊠ Claim(s) <u>1-71</u> are subject to restriction and/or €	election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)	4) Interview Summary	(PTO_413)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application (PTO-152)					

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DETAILED ACTION

Claim objection

1. Claim 44 is objected to as being improper dependant claim since claim 44 is a processor device (a system of many devices) while claim 41 is only a memory device that is a sub-system of claim 42.

Correction is required.

Election/ Restriction

- Claims 1-71 are pending in this application.
- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - **Group I.** Claims 1-41, drawn to a memory cell or a memory device, is classified in class 257, subclass 100 or class 257, subclass 314
 - **Group II.** Claims 42-46, drawn to a processor system classified in class 700 subclass 90
 - **Group III.** Claims 47-77, drawn to a memory reading method, is classified in 365, subclass 185.14.
- 3. in the case Applicant Elect group I: these inventions are further required to be restricted under 35 U.S.C. 121 as the following:

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Sub-Group A: Claims 1-18: drawn to a memory cell, is classified in class 257, subclass 100

Sub-Group B: Claims 19-41: drawn to memory device is classified in class 257, subclass 314

4. in the case Applicant elect group III these inventions are further required to be restricted under 35 U.S.C. 121 as the following:

Species 1: Claims 47-61 as best as it can be understood is described in claim 47 with all the technical features as recited in claim 47.

Species 2: Claim 62-77 as best as it can be understood is described in claim 62 with all the technical features as recited in claim 62.

5. in the case Applicant elect Sub-Group B these inventions are further required to be restricted under 35 U.S.C. 121 as the following:

Species C: Claims 19-26 as best as it can be understood is described in claim 19 with all the technical features as recited in claim 19.

Species D: Claim 27-41 as best as it can be understood is described in claim 62 with all the technical features as recited in claim 27.

6. The inventions are distinct, each from the other because of the following reasons:

Inventions I and III are related as product and process of use. The inventions are distinct if either or both of the following can be shown: (1) that the process for using the product

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as claimed can be practiced with another product (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the memory cell or memory device can be used for a method of erasing the memory cells that is a materially different method from Group III.

- 7. Because these invention are distinct for the given reasons above and have acquired a separate status in the art because their recognized divergent Subject matter, restriction for examination purpose as indicated is proper
- 8. The inventions are distinct, each from the other because of the following reasons:

 Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the processor system can be patentable with a novel processor. The subcombination has separate utility such as: the claimed memory device can be used in memory card reader data storage with no processor.
- 9. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, the fields of search are

not co-existent. Therefore, separate examinations would be required and restriction for examination purposes as indicated is proper.

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- 10. The inventions are distinct, each from the other because of the following reasons:

 Sub-group B and Subgroup A are related as combination and subcombination.

 Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because memory device can be patentable with a novel stacking method. The subcombination has separate utility such as: the claimed memory cell can be used as a stand-alone switch on an analog timer for example.
- 11. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, the fields of search are not co-existent. Therefore, separate examinations would be required and restriction for examination purposes as indicated is proper.
- 12. Applicant is advised that the response to the above requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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13. For Species election requirement, Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

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Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, Applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the response to this requirement to be complete must include an 14. election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

CONCLUSION

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh T Nguyen whose telephone number is 571-272-1790. The examiner can normally be reached on 9.00 AM 6.00 PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID NELMS can be reached on (571) 272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9319 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval [PAIR] system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thelm

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Thinh T Nguyen

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